

north georgia college



Graduate Bulletin

NOTICE OF RESPONSIBILITIES

Institutional

1. North Georgia College does not discriminate on the basis of handicap in violation of Section 504 of the Rehabilitation Act of 1973. This nondiscrimination policy applies to admission or access to, or treatment, or employment in, its purpose and activities.
2. No person shall, on the ground of sex, age, creed, race, or national origin, be excluded from participation in or be denied the benefits of any program or activity conducted by North Georgia College.

Student

1. It is important that each student note that it is his/her responsibility to keep himself/herself appraised of current graduation requirements for his/her particular degree program.

The statements set forth in this catalog are for informational purposes only and should not be construed as the basis of a contract between a student and North Georgia College. The College reserves the right to change any provision listed in this catalog, including, but not limited to academic requirements for graduation, without actual notice to individual students.

2. It is important that each student satisfy his/her financial obligations to North Georgia College. The College reserves and intends to exercise its right to withhold copies of educational records and/or to disenroll students who owe money to the College.

Graduate Bulletin

1981-83

For clarification of or additional information about any part of this book, please contact the Director of Graduate Studies, North Georgia College, Dahlonega, Georgia, 30597 or 404-864-3391.

GRADUATE CALENDAR 1980-81

Fall Quarter, 1980

September 18-20	Orientation (INTRO)
September 22	Student Advisement
September 23	Registration
September 24	Classes Begin
September 26	Final Day for Changing Schedules
October 29	Mid-Term Grade Reports Due
November 22	Comprehensive Examination
November 27-28	Thanksgiving Recess
December 8-10	Examinations
December 11	Final Grade Reports Due

Winter Quarter, 1981

January 5	Student Advisement
January 6	Registration/Classes Begin
January 8	Final Day for Changing Schedules
February 6	Mid-Term Grade Reports Due
March 7	Comprehensive Examination
March 12, 13, 14	Examinations
March 16	Final Grade Reports Due

Spring Quarter, 1981

March 23	Registration/Classwork Begins
March 25	Final Day for Changing Schedules
April 22	Mid-Term Grade Reports Due
May 9	Comprehensive Examination
May 31	Commencement
June 1-3	Examinations
June 4	Final Grade Reports Due

Summer Quarter, 1981

June 16	Registration
June 17	Classwork Begins
June 19	Final Day for Changing Schedules
July 18	Comprehensive Examination
August 10-12	Examinations
August 13	Final Grade Reports Due

General Information

Expenses and Fees

Financial Aid

Facilities

GENERAL INFORMATION

History

North Georgia College was founded in 1873 as a liberal arts college for men and women. It is a state supported senior unit of the University System of Georgia under the direction of the State Board of Regents. It is located in Dahlonega, Georgia, on the site of the original U.S. Government Gold Mint. Dahlonega, a town of about 3,000 people, is located in the foothills of the beautiful Blue Ridge Mountains—70 miles and 1½ hours north of Atlanta via U.S. 19, or I-85 and Georgia 60 through Gainesville.

North Georgia College was approved by the Board of Regents of the University System of Georgia to initiate a graduate program for teachers in June, 1974. This approval followed a four-year period of service by the College as a resident graduate center for the University of Georgia. In its approval, North Georgia College was authorized to offer the Master of Education degree in the areas of Early Childhood Education, Elementary Education, Secondary Education, and Special Education.

Statement of Purpose

The objectives of the program are directly related to the goals of North Georgia College as stated in the statutes of the college. More specifically, the program is designed to provide preparation for teachers at the fifth year level, to equip superior graduate students for study at advanced levels, and to provide teachers who do not desire a graduate degree the opportunity to enhance their skills and knowledge. Any graduate of the program should be capable of sustained study, possess a relatively broad knowledge of the literature in his area of study, and possess a reasonable ability in research.

Accreditation and Memberships

North Georgia College, as a senior member of the University System of Georgia, is a fully accredited member of the Association of American Colleges, the Association of Military Colleges and Schools, the Southern Association of Colleges, and the Association of Georgia Colleges. Its work in the field of education is recognized and accredited by the National Council for the Accreditation of Teacher Education and the Georgia State Department of Education. The quality of the training offered in all departments has long enjoyed national recognition. A significant number of its graduates attend graduate and professional schools; and just as significantly, perhaps, is the

fact that many of its military graduates, as they move into active service, go to military graduate schools.

COLLEGE EXPENSES AND FEES

All fees are payable at the time of registration for each quarter. Registration is not complete until all fees have been paid. All matriculation and other charges are subject to change without notice. Payment may be made either in cash or by check. If a check given in payment of a student's fees, books, or supplies is not paid upon presentation to the bank on which it is drawn, the student will be charged the maximum service charge for late registration, which is \$15.00 and a \$5.00 bad check service charge.

Application Fee

ALL APPLICANTS to North Georgia College for graduate studies must submit a ten dollar (\$10.00) Application Fee with their Application Form before the applicant will be given consideration as a prospective student. The Application Fee is non-refundable and will not apply toward the student's registration fees.

Tuition

The University System of Georgia requires no general tuition fee of students who are legal residents of the State of Georgia, and there is no charge for instruction, except for certain courses requiring instruction on an individual and small-group basis.

Matriculation Fee—Resident Students

Each student is required to pay matriculation fees. A student who is a legal resident of the State of Georgia according to the regulations of the Board of Regents of the University System of Georgia, and who has been a legal resident of the state for at least twelve months preceding the date of his registration must pay Resident Student fees. These fees are payable in advance at the beginning of each quarter.

Matriculation Fee	\$178.00 per quarter
	15.00 per quarter hour

Matriculation and Tuition Fees—Non Resident Students

Each student who has not been legally domiciled in the State of Georgia under the regulations of the Board of Regents for at least twelve months

preceding the date of his registration shall pay at the beginning of each quarter the following matriculation and tuition fees:

Matriculation Fee	\$178.00 per quarter 15.00 per quarter hour
Tuition—Out-of-State	\$318.00 per quarter 27.00 per quarter hour
Total	\$496.00 per quarter 42.00 per quarter hour

Student Activity Fee

A student activity fee of \$24.00 is charged every student taking six or more hours each quarter. The opportunity for students to enhance their total college environment and more fully appreciate the esthetics of cultural, religious, social, and athletic participation is an integral part of a sound educational process. Student activity fees are utilized to provide cultural, social, and athletic programs for the entire student body. In addition, these fees provide financial support for student facilities at the College, guest speakers and lecturers, student publications, and similar projects which are available for the exclusive use of the students of North Georgia College.

Student Health Fee

A student health fee of \$20.00 is charged every student taking six or more hours each quarter. The Infirmary is open for student use on a 24 hour a day basis and consultation with a physician is available daily.

Room And Board

Room and board is available at the following rates:

Room	\$195.00 per quarter
Board	\$250.00 per quarter

Room reservations can be made by submission of a \$25.00 deposit.

Late Registrants

A student who fails to register during the period set aside for this purpose will be required to pay a \$15.00 service charge for late registration.

Transcript Fee

A student who has discharged all financial obligations to North Georgia College is entitled to receive on request and without charge one transcript of his academic record. A charge of \$1.00 will be made for each additional

transcript. If supplementary work is taken at the college one additional transcript of the student's total record will be furnished without charge.

Graduation Fee

Every student receiving a degree must pay a graduation fee of \$20.00 to cover all expenses, including the rental of cap, gown, hood, and the cost of the diploma. Students may procure the necessary forms and pay the graduation fee at the Registrar's office.

Refund of Matriculation Fees

Formal withdrawal must begin with a written approval from the Director of Graduate Studies. At the time this approval is granted, specific instructions will be given for the student to complete his formal withdrawal. Any deviation from this procedure will be considered as an irregular withdrawal and will result in the forfeiture of the refund.

In the case of formal withdrawal, a refund of the Matriculation Fee may be made on the following basis:

- (1) Withdrawal during one week following the scheduled registration date; a refund of 80% of the Matriculation Fee paid for that quarter;
- (2) Between one and two weeks, 60%;
- (3) Between two and three weeks, 40%;
- (4) Between three and four weeks, 20%;
- (5) After four weeks, no refund.

No refund can be made on Activity or Health fees.

In case of withdrawal, a refund on board and room may be made on the number of full weeks remaining in the quarter.

In the case of excused absence, a refund on board, not room, may be given on that part of the student's absence which is in excess of two weeks.

FINANCIAL AID

Graduate Assistantships

Assistantships are available in departments offering degrees. Stipends vary, depending upon services rendered. Students interested in such grants may obtain further information by writing the Dean of the College.

Residence Hall Directors

Hall director positions are periodically available to a very limited number of graduate students. Students awarded these positions receive compensa-

tion based upon work done and responsibilities. Detailed information regarding these positions can be obtained from:

Ms. Katherine Hinz, Assistant Dean of Students
North Georgia College
Dahlonega, Georgia 30597

Loans and Part-Time Employment

North Georgia College participates in the National Defense Education Act Loan Program. Loan ceilings are \$10,000 in the aggregate for graduate students (including any undergraduate loans). If the student enters the teaching field after college and teaches physically handicapped or children in a defined poverty area, 100% of the loan (plus interest) may be cancelled. Cancellation of the loan (plus interest) takes place at the rate of 15% per year for the 1st and 2nd year, 20% per year for the 3rd and 4th year and 30% per year for the 5th year.

Part-time positions are available for graduate students. Those interested in loans or part-time employment may obtain detailed information by writing the Director of Financial Aid.

Teachers seeking state grant-in-aid should write: Consultant, In-Service Teacher Education, State Office Building, Atlanta, Georgia 30334.

Veterans Administration Benefits

North Georgia welcomes the opportunity to assist former servicemen and women eligible for benefits under Public Law 894 or Public Law 550 and war orphans eligible for benefits under Public Law 634. The Veterans Affairs Office at North Georgia College provides an advisory service for students eligible for benefits under these laws. Students planning to attend college under these laws should obtain an application for the Veterans Affairs Office at the College. This office will process the application and certify enrollment.

FACILITIES

Library

Stewart Library completed in 1971 has over 100,000 volumes, and more than 160,000 units of microtext (including *New York Times* from 1923 to date, *Dissertation Abstracts* from 1938 to date, and complete *ERIC* files). Subscriptions are maintained to more than 900 periodicals including major education indexes and journals.

Reference services include: interlibrary loan, access to the Southeastern

Regional Medical Library Program (SERMLP) and computer searches through the Georgia Information Dissemination Center (GIDC).

Stewart is a U.S. Government Selective Depository Library for this area.

Circulated materials include books, audio-visual equipment, filmstrips, film, musical recordings, clipping and pamphlet files.

The professional library staff is available 82 hours per week to assist researchers.

Computer Facilities

Thru the University System of Georgia Computer Network North Georgia College has access to the following Computers:

University of Georgia	CYBER 70
Georgia Tech	CYBER 70
Georgia State University	UNIVAC 90/80

At the present time there are seven terminals located in various locations on campus that can provide access to these computers for academic use. Due to line limitation, a maximum of five terminals can be connected at any time.

A SCIDATA computer and a TI 990/10 computer are currently being used by North Georgia College for administrative applications. Both of these computers can be used as a remote job entry terminal to the facilities provided by the University System Computer Network.

Instructional Media

The Department of Education maintains an Instructional Media Laboratory and a Video-tape Laboratory. The laboratories exist and only to provide audio-visual equipment, but has trained staff on hand to provide services and consultation in providing more effective means of instruction.

Admission

ADMISSION

Requirements

To be admitted, an applicant must hold a bachelor's degree from an accredited college or university and must meet other admission requirements as outlined below. The applicant must submit transcripts from all institutions where he/she earned 30 or more quarter hours and satisfactory scores on the NTE or GRE.

Standings

Applicants may be admitted to the Graduate Studies Program in one of the following standings.

- A. *Regular Standing*—A student who has graduated from an accredited institution with a cumulative undergraduate GPA of 2.5 or above; GRE Score of 800 or above on the aptitude portion or NTE Score of 550 or above on the Common portion; adequate recommendations or references.
- B. *Provisional Admission*
 - 1. The student must hold an undergraduate degree from an accredited college or university with an undergraduate major in, or prerequisite for, the planned field of study where applicable.
 - 2. If a student fails to meet either the minimum undergraduate grade point average or entrance test requirements for regular admission, he/she may be considered for provisional admission if the undergraduate grade point average multiplied by 100, and added to the student's score on the Common Examinations of the National Teacher Examinations equals 750, or if the grade point average multiplied by 100 and added to the student's score on the Aptitude Test of the Graduate Record Examinations equals 1000. In no event may the undergraduate grade point average be less than 2.2, the score on the Common Examinations of the National Teachers Examinations be less than 700.
 - 3. Students may remain admitted on a provisional basis until they have attempted 15 hours of graduate work. If they satisfactorily complete the initial 15 hours of work with no grade of less than a "B", they may be admitted to a degree program subject to approval by appropriate college officials.

NON-DEGREE STUDY

- C. *Post-Baccalaureate Admission* (Definition: The student has applied for admission for the purpose of taking courses for certification or personal enrichment.)
 - 1. A student in this category must have a baccalaureate degree from an

accredited college with a minimum grade point average of 2.0 calculated on all undergraduate work attempted.

2. No more than 15 hours of credit earned in this category may subsequently be applied toward meeting the requirements of a master's degree at an institution in the University System, provided that provisional or regular admissions are met. No credit earned in this classification may be applied to programs of study leading to the Specialist in Education degree.

D. *Post-Graduate Admission* (Definition: The student, holder of an earned graduate degree, has not applied for another degree program, but wishes to take work for certification or personal enrichment.)

1. Students in this category must have a graduate degree from an accredited college.
2. No more than 15 hours of graduate credit earned in this category may subsequently be applied toward meeting the requirements of a graduate degree at an institution in the University System. No credit earned in this classification may be applied to the Specialist in Education degree programs.

ADMISSION TO THE GRADUATE STUDIES PROGRAM DOES NOT IMPLY ACCEPTANCE AS A CANDIDATE FOR A MASTER'S DEGREE.

Procedure

Application forms may be obtained from the Office of Graduate Studies or the College Admissions Office. The completed form with the \$10.00 application fee, transcripts and test scores should be returned to the Admissions Office, North Georgia College. All materials should be in the admissions office at least 20 days prior to the time of enrollment.

If an applicant cannot enter the Graduate Studies Program at the quarter indicated on the application form, he should inform the admissions office of his/her plans.

Transfer

Students wishing to transfer into the Graduate Studies Program must become a degree seeking candidate and meet all the requirements of applicants for regular standing. He may offer in transfer, a maximum of 10 hours with grades of B or better from an accredited Graduate School. All work, including transfer credit, must be completed within a 6 year period.

Degree Requirements

REQUIREMENTS FOR GRADUATE DEGREES

Admission to Candidacy

Admission to candidacy may be granted to any regular graduate student when the following requirements have been met: (1) the student has completed at least 15 quarter hours of acceptable graduate work at North Georgia College; (2) he has filed an application for candidacy in the office of the Director of Graduate Studies; (3) he has been recommended by his major department; (4) he has on file in the Graduate Office a program of study approved by his advisor, the appropriate department chairman, the Director of Graduate Studies and the College Dean; and if applicable, an approved plan for thesis or research project.

A student seeking fifth-year teacher certification should furnish evidence that he is eligible for the Georgia T-4 Certificate.

The student must be admitted to candidacy prior to enrollment in his sixth course. He and his advisor will be notified by the Director of Graduate Studies when he has been admitted to candidacy.

Entrance Tests for Regular Standing

For any applicant one of the following tests is acceptable:

1. The Aptitude Test of the Graduate Record Examination with a minimum score of 800.
2. The National Teacher Examination with a score on the Common Examination of 550.

The Graduate Record Examination and the National Teacher Examination are offered several times a year at numerous testing centers in the United States and abroad.

Academic Performance

A graduate student must maintain a 3.0 or better grade point average. The record of any student receiving more than two C's will be subject to review by an Ad hoc graduate review committee appointed by the Chairman of the Graduate Council and composed of no fewer than three members, two of whom shall come from the Department of Education.

There shall be two classifications for students who do not maintain a B average:

1. Academic Notice—when any student falls below a B average he will be placed on academic notice until the B average is attained. No student may become a candidate for the degree or take the comprehensive examination while on academic notice.
2. A student whose Grade Point average falls below 2.67 anytime after 30

quarter hours have been attempted will be placed on probation. No student may be a candidate, or take the comprehensive examination while on probation. In addition the following policies will be enforced:

- (a) When a student earns one F he will be placed on probation.
- (b) No grade below a C will be accepted toward degree.

Program of Study

Prior to admission to candidacy for the Master of Education degree, the student and his advisor must prepare a formal Program of Study, which is submitted for approval to the Director of Graduate Studies in Education. The Program of Study must be completed and on file in the Graduate Office by the time the student has completed 25 hours of graduate work. If the student is following the program requiring a thesis, the thesis subject must also be submitted for approval.

The Program of Study shall consist of those courses for which graduate credit is granted toward a degree or teacher's certificate. No changes may be made in the Program of Study without approval in advance by the Director of Graduate Studies. A memorandum of such changes must be appended to the Program of Study in the candidate's file.

North Georgia College offers the following degrees in the field of Education:

Master of Education in Early Childhood Education

Master of Education in Elementary Education

Master of Education in Special Education

Interrelated

Learning Disabilities

Mental Retardation

Behavior Disorders

Master of Education in Secondary Education:

Art

Behavioral Science

Biology

Business Education

Chemistry

English

History

Mathematics

Modern Languages

Music

Physical Education

Physics

Political Science

Science

Social Studies

North Georgia College has been designated as a Residence Center for certain 6th year programs offered by the University of Georgia. For information contact the Director of Graduate Studies.

Course Requirements

The program, planned as a logically organized whole and interrelated with the student’s undergraduate years, will meet the following minimum requirements:

Program Without Thesis. The program without thesis requires a MINIMUM OF 55 QUARTER HOURS OF COURSE WORK, of which 30 hours must be in courses numbered 700 or above. The 55 quarter hours shall be organized in the following manner:

A. Education 700—Foundations of Education	5 hours
B. Education 701—Educational Research	5 hours
C. Education 702—Psychology of Classroom Learning	5 hours
D. Education 713, 734, 773, or Special Education 770	5 hours
(Students should take the curriculum related to their area.)	
E. Academic Concentration (Minimum)	25 hours
F. Elective—(To be chosen from Education)	5 hours
G. Elective—(Chosen from Education or Academic concentration)	<u>5 hours</u>
Total	55 hours

Program With Thesis. The program with thesis requires a minimum of 45 quarter hours of course work, of which 25 quarter hours must be in courses numbered 700 or above. The program with thesis will be organized in the following manner:

A. Education 700—Foundations of Education	5 hours
B. Education 701—Educational Research	5 hours
C. Education 702—Psychology of Classroom Learning	5 hours
D. Education 713, 734, 773, or Special Education 770	5 hours
(Students should take the curriculum course related to their area).	
E. Academic Concentration	25-30 hours
F. Thesis	
(Students should register for Education 709)	<u>5-10 hours</u>
Total	55 hours

Thesis

The thesis must embody the results of a study related to the student’s academic concentration. The study must demonstrate the student’s ability to successfully attack a genuine education problem and draw logical and significant conclusions from the data.

Each student undertaking a thesis should register for Education 709 above the required 45 quarter hours. Grading for this course will be done by the student’s major professor. Grades given should depend upon the progress of the student with his thesis.

The format of the thesis must conform to the requirements specified by the college.

The candidate must consult with all members of his committee as the thesis progresses, and suggestions must be incorporated before the final form of the thesis is typed. The final copy of the thesis must be submitted to all members of the examining group not later than one week preceding the date of the examination. Revisions or corrections by the examining committee must be made before acceptance of the thesis becomes final.

Residence

In any graduate program all work submitted for a degree (including the comprehensive examinations) must be completed within a six-year period. It is expected that the student will complete his program with reasonable continuity. Students called into military service may apply for an extension of time.

Transfer, Extension, Correspondence Credit

In any graduate program a maximum of 10 quarter hours of graduate credit may be transferred from another accredited institution subject to the following conditions: (1) work already applied toward another degree cannot be accepted; (2) work must have been completed within the six-year period allowed for the completion of degree requirements; (3) work must have been applicable toward a graduate degree at the institution where credit was earned; (4) work offered for transfer must have the approval of the Director of Graduate Studies and the head of the department or advisor of the student's major; (5) acceptance of the transfer credit does not reduce the residence requirement stated above.

Under no circumstances may credit earned through correspondence work be applied toward satisfaction of degree requirements.

Course Numbers and Load

Courses numbered 700 and above are open only to graduate students. Certain courses devoted to fundamental knowledge carry a 300/400 number for an undergraduate in the senior division and a corresponding 600 number for a graduate student.

A full load for a graduate student is 10-15 hours per quarter. If a student is fully employed, he should take only five hours of graduate work during the time he is employed. A student on a graduate assistantship may take a maximum of ten hours of graduate work per quarter.

The college makes every effort to maintain the schedule of courses as announced in its bulletin. However, the right is reserved to withdraw

courses, change instructors, or change the schedule of classes at any time without previous announcement.

All students should be careful not to enroll in courses which they have previously taken. The final responsibility for duplication of courses rests with the student.

Grading System

All institutions of the University System of Georgia shall be on a 4.0 grade point average system. The following grades are approved for use in institutions of the University System of Georgia and are included in the determination of the grade point average:

- A — Excellent
- B — Good
- C — Satisfactory
- F — Failure
- WF — Withdrew, failing

The following grading symbols are approved for use in the cases indicated, but will not be included in the determination of the grade point average.

- I — This symbol indicated that a student was doing satisfactory work but, for non-academic reasons beyond his control, was unable to meet the full requirements of the course. If an "I" is not satisfactorily removed within two quarters, the symbol "I" will be changed to the grade "F" by the appropriate official.
- W — This symbol indicates that a student was permitted to withdraw without penalty. Withdrawals without penalty will not be permitted after the mid-point of the total grading period except in cases of hardship as determined by the appropriate official of the respective institution.
- V — This symbol indicates that a student was given permission to audit this course. Students may not transfer from audit to credit status or vice versa.

Teacher Certification

Teacher certification is a complex process. If the student is already fully certified in the State of Georgia, he needs simply to follow the program as outlined under the Program of Study to obtain certification at the fifth-year level. However, if the student does not hold a teaching certificate additional work will be required. Questions should be referred to the Director of Graduate Studies or to the Head of the Department of Education.

Area Teacher Education Services

North Georgia College is a member of the Northwest Georgia Area

Teacher Education Service (NWGATES). The area services attempt to coordinate the off-campus education courses offered by the state-supported graduate institutions within the state. Students are allowed to take as many as twenty-five hours of their graduate work through the area services, provided their major professor approves the courses to be taken.

Off-campus work through the area services should not be confused with transfer credit. Only ten quarter hours of work done in an accredited graduate institution may be counted toward an advanced degree. No correspondence work may be counted.

Advisers

The Director of Graduate Studies in Education is the general adviser for all graduate students, but, so far as particular courses are concerned a student is counseled by the head of the major department or by professors appointed as academic advisers for each student. A new student seeking an adviser should go to the Director of Graduate Studies who will assign him to a particular adviser.

The adviser is expected to provide the graduate student with a list of courses required for graduation. At the time of each registration, the adviser should approve the student's program of study.

Faculty Committees

For students admitted to candidacy in programs requiring a thesis, an advisory committee is appointed by the Director of Graduate Studies in Education. The chairman shall come from the academic department concerned, with the remaining two members coming from the Department of Education. The chairman serves as the major professor for work on the thesis, but the candidate is expected to consult regularly with all members of the committee while the work is in progress. The thesis defense is conducted by the student's committee.

Students who are candidates in the program not requiring the thesis will be advised only by their major professor until they reach the point of taking their comprehensive examinations. At this time the major professor will choose two additional faculty members and form a committee to administer the examination. The committee must be approved by the Director of Graduate Studies. The core comprehensive examination is required of all candidates and is administered by the Director of Graduate Studies.

Change of Program

Before a graduate student may transfer from one degree program to another, he must submit his request in writing to the Graduate Director. This request must then be approved by the new major department and the

Director of Graduate Studies. Unauthorized changes may result in additional degree requirements.

Comprehensive-Final Examinations

A comprehensive-final examination is required of all candidates for a graduate degree after the other requirements have been met. The following regulations govern the administration of the comprehensive examination:

1. The student must be registered when he takes the examination.
2. Students must apply with the Director of Graduate Studies to be permitted to take the examination.
3. Each student is required to take an examination. Whether it is oral and/or written is determined by the student's major department.
4. The examinations are administered by the committee comprised of the major professor and two or more additional faculty members. The committee must be approved by the Director of Graduate Studies.
5. The examination covers all work prescribed by the student's program of work, including transferred work, and, if applicable, the thesis or research project.
6. The core comprehensive examination is required for all candidates and is administered by the Director of Graduate Studies.

GRADUATION

A student must apply for graduation at the Registrar's Office during the first week of his/her final quarter. However, a student completing degree requirements during Spring quarter must apply for graduation the first week of the *Winter* quarter. The fee will be submitted to the Registrar of the College. The student is expected to attend the graduation exercise at which his/her degree is to be conferred.

No student will be issued a diploma or a transcript of credits if he is in default of any payment due the college.

Program Check List

Check List
MASTER OF EDUCATION PROGRAM

Procedure	Filing Date	Availability of Forms	Submit to
1. Admission to regular standing. (For Provisional & Post-Baccalaureate.)	Prior to completion of 25 quarter hours.	Director of Graduate Studies	Director will submit to Graduate Office
2. Selection of Major Professor or Committee upon acceptance into Graduate Program.	As soon as possible after admission.	Director of Graduate Studies	Director of Graduate Studies
3. Completion of Program of Studies.	Prior to or upon completion of 15 hours.	Graduate Office	Graduate Office
4. Application for Admission to Candidacy for Master's Degree.	After completion of 15 hours and before completion of 25 quarter hours.	Director of Graduate Studies	Director of Graduate Studies
5. Request for transfer of graduate credit earned in another school. (No work will be transferred unless student makes a formal request).	Immediately after student is admitted to candidacy for the degree.	Graduate Office	Student's Major Professor
6. Plan with Major Professor and Committee on Research, if thesis program is chosen.	Immediately after student's Major Professor or Committee is appointed.	None	None

Check List Continued

Procedure	Filing Date	Availability of Forms	Submit to
7. Application for Comprehensive Examination.	First week of final quarter.	Graduate Office	Graduate Office
8. Order Cap and Gown.	No later than Feb. 15 for June Commencement or first week of final quarter.	Registrar's Office	Registrar
9. Pay diploma fee.	First week of final quarter.	Registrar's Office	Registrar
10. If under Thesis Program, Thesis with signed approval forms and receipt for Thesis binding.	At least 20 days before degree is conferred.	Director of Graduate Studies	Director of Graduate Studies
11. Take final oral and/or written examination.	At least 20 days before degree is conferred.	Director of Graduate Studies will set date, time, place, and notify student of results of examination.	
12. Defense of Thesis.	Same as above.		

Candidates for the M.Ed. degree must meet certain undergraduate requirements in the teaching area. Since these requirements vary from department to department it will be necessary for the student to plan with an adviser in the department. It is the student's responsibility to insure that all requirements both undergraduate and graduate have been met. Each department will provide the candidate with a list of requirements upon request.

Course Descriptions

BEHAVIORAL SCIENCE

PSY—Experimental Psychology 5 hrs

600 This course is designed to introduce students to experimental methods as applied to behavior. Some basic standard tools will be presented. Students will learn design of elementary experiments. Laboratory time will be spent implementing simple procedures.

PSY—Child Development 5 hrs

601 A study of the roles played by maturation and experience in the social, emotional, moral, and physical development of children from the prenatal period to adolescence. Observation of children in public school required for two hours weekly.

PSY—Psychology of Adolescence 5 hrs

602 A study of the physical, social, and cognitive adolescent with emphasis on the problems of transition to adulthood.

PSY—Educational Psychology 5 hrs

605 Emphasis on learning, its nature, motivation, retention, appraisal, transfer, and application. Adjustment of educational practices to individual differences in abilities and interests among pupils will be considered. Some observation in teaching-learning situations will be done.

PSY—History and Systems 5 hrs

609 An integrative course emphasizing the origins and background of the science of behavior. Important contributors and their schools of thought will be studied. Relating these schools of thought to present systematic developments in psychology will be emphasized.

PSY—Psychological Reading and Research

610 2 hrs

611 2 hrs

612 Prerequisite: 2 hrs
Permission of Instructor

PSY—Social Psychology 5 hrs

615 A theoretical and empirical study of social relationships and their effects

on individuals. Behavior in small group settings will be emphasized.

PSY—Mental Hygiene 5 hrs

617 An advanced course dealing with mental hygiene problems, especially of children and adolescents; problems of different stages of maturation adjustments in the home, school and play groups; and special needs in cases of retardation and delinquency.

PSY—Psychometrics 5 hrs

619 An introduction to theories and practices of psychological measurement. The characteristics and uses of specific maximum and minimum performance assessment devices will be included.

PSY—Psychology of Leadership 5 hrs

620 Psychology 101 is recommended but not required as a prerequisite. The characteristics of an effective leader will be studied and analyzed employing both a theoretical and an applied approach.

PSY—Applied Psychology 5 hrs

621 A survey of the principles of psychology as applied to social, business, industrial, governmental, educational, military and other professional fields.

PSY—Industrial Psychology 5 hrs

622 The application of psychological principles to human problems in industry, including areas of personnel selection and appraisal, motivation and work, leadership and human performance.

PSY—Physiological Psychology 5 hrs

623 Prerequisite: 10 hours Biology. Personality is viewed as the integration of the morphology, physiological and psychological aspects of the organism. The relationship between the internal environment and such behaviors as food intake control, mating behavior, neural action, emotion, etc., will be considered.

PSY—Sensation and Perception 5 hrs

625 A study of sensory systems em-

phasizing behavioral significance of structure and physiology.

PSY—Comparative Behavior 5 hrs

- 628** A treatment of evolutionary trends in behavior including neural and hormonal mechanisms, with emphasis on physiology and function.

PSY—Psychology of the

- 630 Disadvantaged 5 hrs**
The effects of severe cultural deprivation—economic, social education—on the psychological growth and development of an individual, in both rural and urban settings will be studied.

PSY—Psychology of Learning 5 hrs

- 631** An empirical and theoretical study of classical, instrumental and operant conditioning, reinforcement, discrimination learning, extinction, verbal learning, and other phenomena.

PSY—Individual Psycho Testing

- 633a Wechsler Scales 3 hrs**
Prerequisite: Psy. 420 or consent of Instructor. Training in the administration, scoring and interpretation of the Wechsler Scales. A minimum competency in the use of these scales for both children and adults is required, but the major part of the practical work may be in the age range selected by the student.

PSY—Individual Psycho Testing

- 633b Stanford-Binet Scales 2 hrs**
Prerequisite: Psychology 420 or consent of Instructor. Training in the administration, scoring and interpretation of the Stanford-Binet Scales. A minimum competency in the use of these scales for both children and adults is required, but the major part of the practical work may be in the age range selected by the student.

PSY—Fundamentals of Behavior

- 635 Modification 5 hrs**
Prerequisite: Psy 333. Selected behavior modification techniques including experimental analysis, successive approximation and other operant techniques, counterconditioning, reciprocal inhibition, and others

as applied to learning problems, mild behavioral disturbances, and mild cases of retardation.

PSY—Theories of Personality 5 hrs

- 643** A critical evaluation of the major theories of personality and a survey of research on major personality variables comprise this course.

PSY—Psychology of the Mentally

- 644 Retarded 5 hrs**
A theoretical and empirical study of the mentally retarded individual, emphasizing etiology, classification and characteristics and treatment.

PSY—Abnormal Psychology I 5 hrs

- 653** This course involves the study of the historical perspectives of abnormal behavior, the various psychosocial models used to understand behavior as well as the study of personality development and adjustment. The major emphasis of the course will be a thorough investigation—involving the causes, dynamics, and treatment—of the following forms of abnormal behavior: transient situational disorders, neuroses, schizophrenia and paranoia, major affective disorders and suicide, sociopathic disorders, delinquency and crime, alcoholism and drug dependence.

PSY—Abnormal Psychology II 5 hrs

- 654** This course deals with the causes, dynamics and treatment of the following forms of abnormal behavior: sexual deviations, psychosomatic disorders, organic brain syndromes, mental retardation, behavior disorders of childhood, maladaptive behavior of groups. Special emphasis will be given to contemporary approaches to therapy.

PSY—Psychological Counseling and

- 663 Psychotherapy 5 hrs**
Prerequisites: Psy. 453 and two additional psychology courses. A study of the various methods employed in counseling and psychotherapy. These methods will be interpreted as they are applied in the treatment of both the "disturbed" and the "normal" individual.

PSY—Group Dynamics 5 hrs
 665 Prerequisite: Consent of Instructor. Examination of major ideas about dynamics of group behavior and their education implications. Laboratory T-Group methods, creative problem-solving groups, and the conduct of experiments in group interaction.

PSY—Advanced Educational
 715 **Psychology** 5 hrs
 Prerequisite: Psy. 101, Psy. 305 and two senior division courses in psychology. Applications of the scientific

findings of psychology to the more complex problems of the educative process.

PSY—Independent Study in
 780 **Psychology** 5 hrs
 Independent reading and research in the area of student's interest with consent of instructor.

PSY—Theories of Learning 5 hrs
 785 An analysis of the major theories of learning current among researchers.

BIOLOGY

BIOG—Local Flora (Botany) 5 hrs.
 601 Prerequisites: Biology 221 and 222. A study in identification and recognition of local plants. Three hours of lecture and two, two-hour laboratory periods per week.

BIOG—Introduction to the Teaching
 615 **of Biology** 5 hrs
 Prerequisites: Biology 101 and 102. A survey of techniques, procedures, demonstrations, projects, and experiments for illustrating central concepts of biology. This course is recommended for Education majors in Biology but is available to other Biology majors who wish to gain teaching experience in the biological sciences. The course meets for four lectures and one two-hour laboratory per week which will involve preparation for or teaching of a laboratory class.

BIOG—Genetics 5 hrs
 620 Prerequisite: Biology 102, or by permission of the Head of the Department. A study of the principles of heredity in plants and animals, with applications to human heredity. Four lectures and one, two-hour laboratory period per week.

BIOG—Comparative Anatomy of
 621 **the Vertebrates** 5 hrs
 Prerequisite: Zoology 220. A course

especially for pre-medical students and biology majors, who need preparation for more intensive study of human anatomy. Representative vertebrates will be dissected and studied in the laboratory. Three lectures and two, two-hour laboratory periods per week.

BIOG—Parasitology 5 hrs
 623 Prerequisites: Biology 220 or permission of the Head of the Department. The course will include a detailed study of the nature of parasitism, the classification, morphology and life histories of animal parasites the epidemiology, pathology and treatment of parasitic diseases of man, domestic animals and other selected hosts. Three hours of lecture and two, two-hour laboratory periods per week.

BIOG—Introductory Microbiology 3 hrs
 624 Prerequisites: Two courses in Chemistry; and Biology 221. An introduction to the principles of microbiology. The course is designed for biology majors. The laboratory phase consists of experiments selected to develop proficiency in the microbiological techniques. Three lectures and two, two-hour laboratory periods per week.

BIOG—Ecology 5 hrs

626 A study of plants and animals in their relations to each other and to the physical and chemical factors of the environment. Four lectures and one, three-hour laboratory periods per week.

BIOG—Physiology 5 hrs

650 Prerequisites: Biology 220 or 250. An advanced course which explores in detail the function of cells, tissues and organs. Students will examine and evaluate current literature in professional journals and conduct independent study which will be reported using an acceptable scientific format. Laboratory will include introduction to techniques in physiological research. The course meets for 4 lectures and one, two-hour laboratory per week.

BIOG—Animal Histology 5 hrs

670 Prerequisites: Biology 321. A study of the germ cells and early development stages of vertebrate groups. Laboratory work involves the microscopic study of vertebrate tissues. In addition, each student will use a number of micro-anatomic techniques to prepare a series of animal tissue slides. Three lectures and two, two-hour laboratory periods per week.

BIOG—General Embryology 5 hrs

680 Prerequisites: Biology 321. A study of the germ cells and early development stages vertebrates. Emphasis is placed on organology of the chick, pig, and man. Three lectures and two, two-hour laboratory periods per week.

BIOG—Man and the Environment 5 hrs

700 A study of the fundamentals of ecology with emphasis upon man's interaction with the natural world. The fundamentals will be used to analyze environmental problems and their implications for the human future. Projects will individualize the course according to student need, interest and expertise.

BIOG—Field Zoology 5 hrs

705 A study of the general biology and ecology of the local fauna with emphasis on field identification.

BIOG—Field Botany 5 hrs

710 A study of the general biology and ecology of the local flora with emphasis on field identification.

BIOG—Independent Study in Biology 5 hrs

780

BUSINESS EDUCATION

BUS ADM—Intermediate Macro Economic

621 Analysis 5 hours

Prerequisites: BA 151 and 152. An intensive study of the measurement, analysis, and control of aggregate economic activity. The economic principles underlying national income, business cycles, and growth are examined; and particular attention is given to problems involved in formulating economic policies.

BUS ADM—Intermediate Micro Economic

622 Analysis 5 hrs

Prerequisites: BA 151 and 152. An in-

tensive study of price theory and its uses. Specific topics covered include the theory of demand, the theory of the firm, pricing in competitive and monopolistic markets, and the pricing of economic resources.

BUS ADM—Consumer Economics 5 hrs

623 This course is designed for teachers and those students who desire a detailed study of consumer problems. The more important elements of consumer education are reviewed, including consumer goods, consumers' services, buying problems, con-

sumer organization, problems of personal finance, and well-balanced spending programs.

BUS ADM—Money and Banking 5 hrs

625 Prerequisites: BA 151. A study of the basic principles and concepts of money and credit and their importance in the present economy. The major topics emphasized are the key role of the commercial banking system in our economy, central banking as a means of expanding and stabilizing the supply of money and credit, monetary theory, monetary and fiscal policies, international banking and finance, and other banking and credit institutions.

BUS ADM—Labor Economics 5 hrs

626 Prerequisites: BA 151 and 152. A study of the origin of the labor movement; population and labor force; organized labor; union organization and management; collective bargaining; and the problems of unemployment, full employment, wage theory and policies, and labor legislation.

BUS ADM—Intermediate Accounting 5 hrs

631 Prerequisites: BA 206 and 207. An advanced study of the accounting theory, principles, and procedures of corporate, partnerships, and proprietorship forms of business. This includes the fundamental accounting processes, financial statements, working capital items, valuation procedures, current liabilities, investment, and plant equipment acquisition and use.

BUS ADM—Intermediate Accounting 5 hrs

632 Prerequisites: BA 680. A continuation of BA 680. Major emphasis is devoted to accounting for intangibles, long-term debt, corporate capital, paid-in capital, retained earnings, analytical processes, and statement of applications of funds.

BUS ADM—Advanced Accounting 5 hrs

633 Prerequisite: BA 682. A more advanced study of accounting procedures with attention given to the more difficult and specialized phases that arise in consignment, installment sales, larger organizations, consoli-

dations, estates and trusts, and actuarial science.

BUS ADM—Income Tax Accounting 5 hrs

635 Prerequisites: BA 206 and 207. A study of federal income tax laws. The various types of returns are studied and emphasis is placed on the determination of income and legal deductions in order to determine taxable net income.

BUS ADM—Cost Accounting 5 hrs

636 Prerequisites: BA 206 and 207. A study of the theory and practice of accounting for manufacturing and selling costs. Detailed consideration is given to elements of cost—direct labor, direct materials, and factory overhead. Process, job order, and standard cost systems are also emphasized.

BUS ADM—Managerial Accounting 5 hrs

637 Prerequisites: BA 206 and 207. A study of the use of accounting as a tool in the decision making process. Major topics covered include budgeting, gross profit, and break-even and cost profit-volume analysis, capital expenditures, and internal profit measurement.

BUS ADM—Auditing 5 hrs

638 Prerequisite: BUS ADM 206 and 207. A course in the theory and practice of professional and general auditing. Auditing standards, internal control, government regulation, and formal report writing are other major topics emphasized.

BUS ADM—Risk and Insurance 5 hrs

641 Prerequisite: BA 151 or permission of instructor. Studies the nature of risk and the role of insurance in risk management from individual and business viewpoints by considering insurance carriers, contracts, underwriting, and regulation.

BUS ADM—Real Estate 5 hrs

642 A study of the concepts, principles, practices, and laws relating to acquiring, holding, utilizing, and disposing of real property.

BUS ADM—Business Finance 5 hrs

645 Prerequisites: BA 206 and 207. A study of financial organization and management from the standpoint of the chief financial officer of an operating business. Major topics emphasized are choosing a form of organization, planning and managing assets, planning the financial structure, managing short- and long-term funds, and valuing business enterprises.

BUS ADM—Public Finance 5 hrs

646 Prerequisites: BA 151 and 152. A study of the principles and techniques of government debt; specific tax and non-tax revenues; and expenditures at the national, state, and local levels.

BUS ADM—Mathematics of Business

651 and Economics 5 hrs

Prerequisites: BA 151, BA 152, Math 101 and 102. A study of mathematical topics which have relevance for students whose major is in one of the management-economic areas. Topics included are linear systems logarithms, mathematics of finance, and differential and integral calculus.

BUS ADM—Mathematics of Business

652 and Economics 5 hrs

Prerequisites: BA 151, BA 152, Math 101 and 102. A study of mathematical topics which have relevance for students whose major is in one of the management-economic areas. Topics included are linear systems logarithms, mathematics of finance, and differential and integral calculus.

BUS ADM—Personnel Management 5 hrs

665 A study of the principles and procedures of the recruitment, selection, and placement of a labor force. Treatment of grievances, problems of collective bargaining, compensation policies, merit rating, promotion, transfer and discharge, training and personnel records are emphasized.

BUS ADM—Retailing Management 5 hrs

666 A study of the organization, planning, policies, procedures problems, and controlling of the various types of retailing institutions. The major topics emphasized include the selection of retailing locations; organization of

retailing services; and the selection, training, compensation and supervision of retailing personnel.

BUS ADM—Management in the

668 Non-Profit Organization 5 hrs

An examination of management principles applied to the non-profit organization. Topics covered would include but not be limited to planning, organizing, staffing, and controlling.

BUS ADM—Principles of Advertising 5 hrs

672 A study of planning, organizing, and controlling involved in the management of the advertising function of business. Major consideration is given to budgeting for advertising, advertising research media selection, preparation of advertisements, services of advertising agencies and the economic and social effects of advertising.

BUS ADM—Principles and Problems

701 in Business Education 5 hrs

Principles of business education in relation to the contemporary problems that face business teachers in the secondary school.

BUS ADM—Problems in Teaching

702 Basic Skill Courses 5 hrs

The theory and psychological principles of skill building and evaluation.

BUS ADM—Problems in Teaching

703 Basic Business Courses 5 hrs

Teaching procedures, materials, standards and evaluation in teaching bookkeeping, management, economics and related courses in the secondary school.

BUS ADM—History and Philosophy

705 of Vocational and Business Education 5 hrs

This course is designed to acquaint students with the philosophy and principles of vocational education in general and vocational business education specifically; federal financial support and other encouragement; organization, administration, and supervision of vocational education.

BUS ADM—Economics for High

720 School Teachers 5 hrs

Develops the content, teaching, and application of economics to citizen needs for teachers who desire an understanding of general economics in the public school curriculum.

BUS ADM—Economics for

- 721 Elementary and Middle School Teachers** 5 hrs
Develops the content, teaching, and application of economics for teachers who desire an understanding of general economics in the K-8 public school curriculum.

BUS ADM—Theory of Accounting 5 hrs

- 739** A study of accounting thought to include both financial and cost accounting theory. Topics of historical significance as well as current problems will be examined.

BUS ADM—Office Management

- 760 Principles** 5 hrs
A study of the principles of scientific office management and their application. Such courses to include the principles underlying operation, organization, and control of business offices, office practices, office buildings, personnel, equipment, and office supervision.

BUS ADM—Independent Study in

- 780 Business Education** 5 hrs
The study of a topic or problem in business education significantly related to the student's interest. (With approval of the student's advisor).

CHEMISTRY

CHEM—History of Chemistry and

- 600 Chemical Literature** 5 hrs
The historical development of modern theories in chemistry will be examined. The chemical literature as an aid in teaching will be examined. In addition, sources of teaching aids such as films and literature will be discussed.

CHEM—Chemical Processes 5 hrs

- 601** A discussion of important industrial processes. This course will also include discussion of such everyday operations as photography, bleaches, detergents, and dyeing. Four hours lecture and one laboratory period per week.

CHEM—Chemistry and the

- 602 Environment** 5 hrs
A comprehensive discussion of the effects of chemical technology on our environment and of the effect of this technology on our standard of living. Four hours lecture and one laboratory period per week.

Chem—Introduction to Biochemistry 5 hrs

- 611** Prerequisites: Chemistry 230 or 331. This course discusses intermediate metabolism and the various classes of compounds involved in those transformations. Four lectures and one laboratory period per week.

CHEM—Inorganic Chemistry 5 hrs

- 621** Prerequisite: Chemistry 340 or 341. An extension of the study of inorganic chemistry begun in general chemistry. The current theories of atomic structure and bonding in complex ions, crystal systems, and some descriptive inorganic chemistry will be discussed. Four lectures and one laboratory period per week.

CHEM—Introduction to Organic

- 630 Analysis** 5 hrs
The course will be devoted to qualitative organic analysis and will be an extension of the identification done as part of the laboratory work of the basic year course in organic chemistry. Instrumentation such as the in-

frared spectrophotometer, the ultraviolet spectrophotometer, the gas chromatograph, and other tools will be used to accomplish the stated objectives. Three hours lecture and two laboratory periods per week.

CHEM—Organic Chemistry 5, 5, 5 hrs
631-632-633

Prerequisite: Chemistry 123. These courses are designed to introduce the student to functional groups and their interconversion, the mechanism of chemical reaction, conformational analysis, and stereochemistry. The third quarter includes an introduction to carbohydrates and amino acids, kinetic methods and an introduction to problems of organic synthesis.

CHEM—Physical Chemistry 5 hrs

640 This course is a non-calculus introduction to physical chemistry. Emphasis is placed on the application of physical chemical principles to the life sciences. Four lectures and one laboratory period per week.

CHEM—Physical Inorganic

721 Chemistry 5 hrs
A comprehensive application of modern theories and of thermodynamics to periodicity and to chemical reactions.

CHEM—Advanced Organic

731 Chemistry 5 hrs
The use of chemical reaction in synthesis. The application of instrumental analysis to structural problems in organic chemistry. Four hours lecture and one laboratory period per week.

CHEM—Instrumental Analysis 5 hrs

751 An examination of the use of instruments such as pH meters, spectronic 20, infrared, atomic absorption to teaching chemical concepts. Four hours lecture and one laboratory period per week.

CHEM—Independent Study

780

EDUCATION

ED—Special Problems in Education 5-10 hrs
600

ED—Child Development 5 hrs

601 A study of the roles played by maturation and experience in the social, emotional, moral, and physical development of children from the prenatal period to adolescence. Observation of children in public school required for two hours weekly.

ED—Human Growth and Development 5 hrs

603 A study of the development of the human from the prenatal period through adolescence. Focuses on the role played by maturation and experience in the social, emotional, intellectual, moral, and physical development of the individual. Includes ge-

netic and environmental influences on the development of the person. Educational practices considered in relation to their effect on the development of children. Treats the relationship of learning and learning theory on classroom teaching & planning. Observation and study of children in public school required two hours weekly.

ED—The Nature and Development of the Middle Grades Learner 5 hrs

604 This course focuses on the nature and diversity of the middle grade learner. Emphasis is placed on the physical, emotional, social, and intellectual development of children from the end of early elementary into the early high school years.

ED—Children's Literature 5 hrs

- 608** The reading and evaluation of books for children. Discussed in the course are sources of information about children's books, children's interests in reading, the work of important authors and illustrators, and problems in the guidance of reading.

ED—Language Arts for Elementary 5 hrs

- 609 Grades**
This course provides for individual diagnosis and correction of problems in the student's handwriting, spelling, oral and written expression. Consideration is given to the study of appropriate techniques and materials for the teaching of reading, handwriting, spelling, and oral and written expression in the elementary school.

ED—Problems in Teaching 5 hrs

ED—The Young Child in the Home 5 hrs

- 612 and Community**
A study of the role of the home, community, and state in the education of the young child. Special emphasis is placed upon working with parents of young children in order to get maximum home reinforcement of the knowledge and skills taught by schools.

ED—Communication Arts 5 hrs

- 614** This course includes language development, methods and materials, literature for young children and assessment of language skills.

ED—Creative Activities 5 hrs

- 615** A course designed to give students experiences in selecting and presenting art activities, stories, finger plays, music, rhythms, woodwork, science and nature experiments in the nursery school.

ED—Educational Measurements and 5 hrs

- 616 Evaluation**
Theory of and practice in construction, administration, and interpretation of tests and other measuring devices for mental ability, special aptitudes, scholastic achievement and personality.

ED—Mental Hygiene 5 hrs

- 617** An advanced course dealing with mental hygiene problems, especially of children and adolescents; problems of different stages of maturation adjustments in the home, school and play groups; and special needs in cases of retardation and delinquency.

ED—Principles of Guidance 5 hrs

- 618** A survey of vocational and educational guidance services designed to give a fundamental understanding of the role of guidance in school programs.

LA—The Teaching of Reading 5 hrs

- 620** An intensive study of reading skills. The role of readiness, vocabulary development, phonics, and word recognition as each is related to comprehension will be studied. Students will be required to participate in the teaching of reading in the public school.

LA—Diagnosis of Reading 5 hrs

- 621 Disabilities**
Prerequisites: LA 620. This is an advanced course dealing with the causes of reading disability and methods for diagnosis both in the classroom and in the special reading program. Emphasis will be placed on preparing the classroom teacher for a role of a "diagnostician" of student with reading disabilities. In depth studies of formal and informal testing procedures as well as field experiences will be required.

LA—Remediation of Reading 5 hrs

- 622 Disabilities**
Prerequisites: LA 620, 621. This is an advanced course dealing with the correction and remediation of reading disabilities. Emphasis will be placed on the study of a variety of remedial strategies, materials needed for a program of remediation and management of the remedial program. Field experiences will be required.

LA—Teaching of Social Studies 5 hrs

- 623** An integrated social studies course designed for teachers. Topics considered include responsibilities of family membership, occupations, labor

unions, taxation, local government functions, ways of communications, and world cultures other than our own.

LA—Teaching Reading in the Middle,

- 630 Junior High, and Secondary School** 5 hrs
Study of objectives and methods for teaching comprehension, vocabulary, study skills, and critical reading in the content areas. Attention to remedial and enrichment techniques for secondary students.

LA—Juvenile Literature 5 hrs

- 633** Reading and study of the various types of literature for young people, as well as a study of the appropriate reading programs for junior high school pupils, are included in this course.

LA—The Teaching of

- 642 Composition** 5 hrs
A study of current approaches to the teaching of composition with specific emphasis on sequential curriculum development K-12, motivational strategies, techniques of student evaluation, processes of revision, and program evaluation. Prerequisite: Enrollment in Georgia Mountains Writing Project.

ED—Classroom Management and

- 640 Organization** 5 hrs
This course is designed to provide classroom teachers with the knowledge and skills for managing the total instructional setting, including the individualization of instruction. Emphasis will be placed on grouping, teacher-student relationships, establishing the classroom environment and coping with class conflict.

ED—Educational Media 5 hrs

- 641** The psychological principles underlying the use of audio-visual equipment and materials will be discussed. Extensive laboratory work will be included.

ED—Teaching of Modern Science

- 661 Curricula—(K-8)** 5 hrs
Five hours of "hands on" class activity per week designed to familiarize the student with modern Elementary Sci-

ence Programs and how to teach them. The course will involve curriculums such as ESS, SCIS, SAPA, and COPES.

ED—Teaching of Modern Science

- 662 Curricula—(7-12)** 5 hrs
Five hours of "hands on" class activity per week designed to familiarize the student with modern Junior High and Secondary Science Programs and how to teach them. The course will involve curriculums such as ESS, SCIS, SAPA, and COPES.

ED—Career Education 5 hrs

- 667** This course provides the student with an orientation toward specialized skills and approaches in implementing world of work concepts through numerous classroom and field based activities. The student will examine existing materials for the purpose of adaptation to this classroom setting.

ED—Administration and Supervision of

- 690 Early Childhood Programs** 5 hrs
A study of administrative and supervisory procedures, organization, policies, standards, funding, staffing, housing, and educational program planning for various kinds of programs for young children. Parent involvement and education will be given special attention.

ED—Foundations of Education 5 hrs

- 700** The sociological, historical, and philosophical foundations for education in America.

GEO—Concepts and Materials in

- 700 Geography for Teachers** 5 hrs
This course considers the evolution of the discipline, its current conceptual core; area "element-complexes," systematic vs. regional analytical procedures. Considers standard bibliographic statistical and cartographic sources. Procedures in adapting information from several sources to the classroom.

ED—Educational Research 5 hrs

- 701** Research procedures, experimental designs and the application of findings, and a research project conducted by the students.

- ED—Psychology of Classroom Learning** 5 hrs
702 Analytical study of learning activities in the classroom, with reference to the learning of school subjects. The focus is on the learning process. Theories and principles of learning are related to classroom situations.
- ED—Statistics for Teachers** 5 hrs
703 A basic introduction to probability and statistics for classroom teachers. Emphasis is placed on the normal distribution, sampling, and measures of central tendency.
- ED—Humanistic Psychology** 5 hrs
707 Humanistic psychology includes the study of self-theory, being-psychology, and contributions of the humanities to psychology.
- ED—Research Problems—Thesis** 5-15 hrs
709
- ED—Seminar in Early Childhood** 5 hrs
710 Provides opportunities to analyze trends, issues, theories, and practices in early childhood education.
- ED—Curriculum Planning** 5 hrs
711 Study of curricula in the public school. Areas of concentrated study will be determined jointly by the school districts involved and the college.
- ED—Language and the Young Child** 5 hrs
712 Language and its acquisition; studied in relation to mental development and school achievement.
- ED—Early Childhood Curriculum** 5 hrs
713 Study of curricula in the public school. Areas of concentrated study will be determined jointly by the school districts involved and the college.
- LA—Trends and Practices in Reading Education** 5 hrs
720 Survey and critical study of recent research, changes, and innovative approaches in the field of reading. Current methods and practices in the teaching of reading will be examined, with emphasis on classroom organization or developmental reading.
- ED—Early Childhood Workshop** 5 hrs
725 Developing teacher made, books, materials and equipment for educational use. Provides opportunities for study of philosophy or organization of open education.
- ED—Trends in Early Childhood** 5 hrs
727 An overview of the history of early childhood education. Current trends and issues with emphasis placed on various approaches to Early Childhood Education.
- ED—Books and Materials for Young Children** 5 hrs
729 Designed to familiarize students with appropriate books, materials, and equipment for program planning in day care centers, nursery schools, kindergartens, and primary schools. Language development will receive special emphasis.
- ED—Practicum in the Middle Grades** 5 hrs
730 Prerequisites: ED 604, ED 734. A supervised practicum for teachers working with 9-13 year olds.
- ED—Practicum in Early Childhood:** 5 hrs
731 Field work based upon the background and individual needs of each student. Prerequisite: Permission of instructor.
- LA—Practicum in Developmental and Remedial Reading** 5 hrs
732 Supervised practice of diagnosis and remediation of disabled readers within public school setting. Regular classroom teaching of reading using a variety of approaches. Experience in working with a reading specialist under faculty supervision.
- ED—Elementary School Curriculum** 5 hrs
733 Deals with theories and philosophies of curriculum and the development of learning experiences. Students will analyze and evaluate current curriculum practices and trends.
- ED—Middle School Curriculum** 5 hrs
734 In this course students will analyze and evaluate current curriculum trends and practices. Theories and philosophies of curriculum for the middle grades learner will be used as

the basis for analysis and evaluation. Development appropriate learning experiences will provide practical application of the theories and philosophies of curriculum.

LA—Diagnostic Teaching 5 hrs

735 Deals with the learners' needs. This course is designed to help the practitioner learn to diagnose learning problems and learning needs. Students will develop diagnostic models to be implemented in the classroom.

LA—Teaching Reading in Elementary

736 and Middle Schools 5 hrs
In depth analysis of current methods and practices in the teaching of reading. Examination and evaluation of various commercial materials will be studies as to effectiveness and adaptability. Laboratory time for teacher-made materials.

LA—Organization and Supervision of the Reading Program

737 5 hrs
Study of methods of organizing the reading program as part of the total curriculum. Role and responsibilities of the reading specialist. Steps to follow in coordinating a school-wide reading program.

LA—Materials and Reading 5 hrs

738 Examination of leading basal readers with manuals and skill texts. Phonics materials, audio visuals, games, and various commercial materials will be studied as to effectiveness and adaptability. Laboratory time for teacher-made materials.

LA—Psychology of Reading 5 hrs

739 Study of neurological and psychomotor development, the processing of information, learning principles,

motivation, the effects of culture and the use of operant conditioning as related to reading.

ED—Seminar in Elementary Education 5 hrs

740 This seminar is based on current trends in elementary education.

ED—Teaching of Math (K-8) 5 hrs

742

ED—Problems in School Organization

743 and Curriculum 5 hrs

ED—Advanced Techniques of Teaching

745 Music 5 hrs
Advanced techniques and materials involved in the effective guidance of learners in kindergarten through high school are studied. Field experience and observation is required.

ED—Guidance in the Elementary

748 School 5 hrs
Studies the nature and development of guidance services in the elementary school. Emphasis is given the particular characteristics of the elementary school as a unique climate for learning.

ED—Secondary School Curriculum 5 hrs

773 Deals with theories and philosophies of curriculum and the development of learning experiences in the secondary schools. Students will analyze and evaluate current curriculum practices.

ED—Independent Study 5 hrs

780

ED—Internship in Supervision in Early

791 Childhood Education 5 hrs
Field work under the supervision of an administrator or supervisor and the college staff.

SPECIAL EDUCATION

Mental Retardation, Interrelated, Learning Disabilities

SP ED—Assessment of Exceptional

650 Children 5 hrs
Prerequisites: SP ED 660 and SP ED 670 or 690. A course offering tests unique to assessing the developmental levels and potential achievement or exceptional children. Emphasis is on the use of the tests in planning and selecting curricular programs and activities.

SP ED—Behavior Management

658 A course emphasizing clinical management of life events; permitting, tolerating, interfering, environmental manipulation, life-space interviewing. Focuses on disturbed children in specific settings.

SP ED—Introduction to Exceptional

660 Children 5 hrs
A study of physical, social, intellectual and emotional differences in children. The characteristics, both physical and behavioral, as well as methods of diagnosis and remediation for the academically talented, the mentally retarded, blind, partially sighted, deaf, hard of hearing, specific learning disabled, culturally disadvantaged and behaviorally disordered are reviewed.

SP ED—Working with Parents of

664 Exceptional Children 5 hrs
A course designed to teach the techniques which an educator uses in communicating with parents of exceptional children. The means of interpreting handicapping conditions and school programs to parents in order to get maximum home reinforcement of the attitudes, skills and knowledge taught in school are covered.

SP ED—Educational and Medical

668 Aspects of Crippling and Special Health Conditions 5 hrs
A study of physically disabling conditions which cause educational difficulties. Orthopedic conditions, progressive deterioration conditions, low

vitality conditions, central nervous system injury and multiple handicaps are covered.

SP ED—Practicum in Home/Hospital

669
SP ED—Introduction to Mental Retardation 5 hrs

A course designed to review the historical treatment, etiology and characteristics of the mentally retarded. Methods of diagnosing, placing and working with the retarded are covered.

SP ED—Speech and Language Development of Exceptional Children

672 5 hrs
This course covers the current understandings of speech and language development of exceptional children. A study of methods, materials, and experiences for enhancement of speech and language development.

SP ED—Vocational Training and Career Education for the Exceptional Child

673 5 hrs
A course emphasizing the educator's role in career development and vocational experiences in the school and community. Job counseling, working with other disciplines and agencies in the community, and supervision in job training situations are covered.

SP ED—Methods and Materials for

674 Teaching the Mentally Retarded 5 hrs
Prerequisites: SP ED 650 and 670. Methods and materials as they relate to the development of desirable attitudes, abilities and skills of the mentally retarded.

SP ED—Methods and Materials for

675 Teaching Severely Mentally Retarded 5 hrs
Prerequisites: SP ED 650 and 670. A course covering diagnostic criteria and the development of teaching materials and relationships with com-

munity organizations interested in developing schools or centers for mentally retarded.

SP ED—Methods and Materials for

- 676 Teaching Children with Learning Disabilities** 5 hrs
Prerequisites: SP ED 690 and 650. A review of theory and research in identifying effective methods of prescriptive teaching and task analysis. Appropriate materials are identified for use in teaching children with specific learning disabilities.

SP ED—Introduction to the Education of

- 680 Children with Emotional Problems** 5 hrs
A course designed to discuss behavioral characteristics of children with emotional and/or behavioral problems. Factors of etiology, identification and therapy are covered.

SP ED—Methods and Materials for

- 681 Teaching Children with Behavioral/Emotional Disorders** 5 hrs
Prerequisites: SP ED 680. A review of major approaches in the education of behavioral and emotionally disordered children. Understanding and planning adaptations in the educational programs for disturbed children. Appropriate plans and materials are identified for use with disordered children.

SP ED—Practicum in Behaviorally

- 682 Emotionally Disordered I** 5 hrs

SP ED—Practicum in Behaviorally

- 683 Emotionally Disordered II** 5 hrs

SP ED—Characteristics of the

- 685 Gifted** 5 hrs
A course covering the identification and characteristics of gifted and talented students from pre-school through high school. Consideration is given to the exploration of alternatives for recognizing gifted and talented children who are culturally different and/or underachieving. Alternative services models and the major instruments used for identifying gifted and talented will be studied.

SP ED—Program Development and

- 686 Curriculum Planning for the Gifted** 5 hrs
Prerequisites: SP ED 685. Methods and materials as they relate to fostering creativity, developing interests, and channeling abilities of the gifted and talented students from pre-school through high school. The course will explore ways of organizing and promoting programs within the public school setting.

SP ED—Practicum with the Gifted 5 hrs

- 687** Prerequisites: SP ED 685 and SP ED 686. Supervised practicum in programs for the gifted.

SP ED—Introduction to Children with

- 690 Learning Disabilities** 5 hrs
A course giving an overview of the field of learning disabilities as concerned with etiology, referral, diagnosis, management and educational practices.

SP ED—Practicum in Learning

- 746A-747A Disabilities I & II** 10 hrs
Prerequisites: SP ED 690, 650, and 676. Supervised practicum in programs for children with practicum in programs for children with learning disabilities.

SP ED—Practicum for Teachers of

- 746B-747B the Interrelated Area I & II** 10 hrs
Prerequisites: Approval of adviser. Supervised practicum in programs for children with learning and/or adjustment problems.

SP ED—Administering and Supervising

- 760 Public School and Special Education Programs** 5 hrs
The administrative practices and problems of organizations, staffing, curriculum development, and supervision of special education in schools. Consideration is given to self-contained and mainstreaming programs.

SP ED—Advanced Theory in

- 770 Curriculum Development and Methods for Teaching the Exceptional Child** 5 hrs
Prerequisites: SP ED 670 or 690, and 674 or 676, and 650. Advanced techniques in class organization, cur-

riculum adjustment, and methods and techniques of teaching children with learning and/or behavior problems.

SP ED—Practicum with the Mentally

- 771-772 Retarded 10 hrs**
Prerequisites: permission of adviser.
Supervised practicum in programs for the mentally retarded.

SP ED—Competencies in Diagnostic

- 777 Prescriptive Teaching 5 hrs**
Prerequisites: Two of the following: SP ED 670, 680, 690. The major objective of this course is to offer the appropriate skills and techniques to enable teachers of children with mild school achievement and/or adjustment problems to more adequately ascertain areas of performance deficiencies of individual children and prescribe and administer corrective

measures with directed effort toward maintaining the mildly handicapped in the mainstream of education.

SP ED—Problems of Teaching Special

- 790 Education 5 hrs**
Prerequisite: Permission of instructor. A seminar providing the opportunity of examining problems and issues which teachers have in teaching handicapped and gifted children. The seminar is taught in relation to actual experiences of teachers.

SP ED—Seminar in Special Education 5 hrs

- 791** Prerequisite: Permission of instructor. An advanced seminar designed to meet individual needs which teachers have in teaching handicapped and gifted children. The seminar focuses on current issues and trends in special education.

ENGLISH

ENG—History of the English

- 601 Language 5 hrs**
A study of the background, origins, and development of the English language, with emphasis on phonological and morphological aspects.

ENG—Southern Literature 5 hrs

- 604** The literature of the South, including a brief background study of the literary trends from the Civil War to the Southern Renaissance and concentrating on writers of the twentieth century.

ENG—Advanced English Grammar 5 hrs

- 607** A comprehensive study of English grammar

ENG—Selected Studies 1-5 hrs

- 620** Prerequisite: Permission of the Department. Reading, investigation, and writing, in the classroom or under informal direction of the faculty, on selected topics or areas not covered in other catalog listings. This course may be repeated for credit.

ENG—Chaucer 5 hrs

- 640** Emphasis on *The Canterbury Tales*.

ENG—Composition Studies for Teachers 5 hrs

- 650** Study and practice of composition theory and teaching techniques.

ENG—English Renaissance 5 hrs

- 660** A survey of non-dramatic English literature from 1500 to the Restoration.

ENG—Milton 5 hrs

- 670** A study of Milton in the context of his classical background and late Renaissance environment.

ENG—English Literature of the

- 680 Eighteenth Century 5 hrs**

ENG—English Literature of 19th

- 690 Century Romanticism 5 hrs**
A study of Romanticism with emphasis on the major poets.

ENG—English Literature of the

- 695 Victorian Era 5 hrs**
A study of the major writers of the

period in both prose and poetry. A general study of social conditions in England from 1832 to 1900.

ENG—Literary Criticism 5 hrs
700 A study of the history and principles of literary criticism.

ENG—American Literature and
710 Thought Before 1800 5 hrs
 A study of the development of American writing during the Colonial and Revolutionary Periods.

ENG—Seminar in Nineteenth Century
715-716 American Literature 5 hrs
 Content will vary according to writers and movements studied.

ENG—Seminar in Twentieth Century
720-721 American Literature 5 hrs
 Content will vary according to genres, authors, movements studied.

ENG—Shakespeare's Tragedies 5 hrs

740 An intensive study of Shakespeare's major tragedies.

ENG—Shakespeare's Comedies 5 hrs
741 An intensive study of Shakespeare's major comedies

ENG—Elizabethan and Seventeenth
745 Century British Drama 5 hrs
 A study of the drama of this period, excluding Shakespeare.

ENG—Seminar in the Restoration and
781-782 Eighteenth Century 5 hrs
 Content will vary according to genres and authors studied

ENG—Studies in Nineteenth Century
790-791 British Romanticism 5 hrs
 An intensive study of Wordsworth-Coleridge or Byron-Shelley-Keats

ENG—Victorian Prose 5 hrs
795 A study of Victorian background and non-fiction prose

FINE ARTS

ART—Drawing 5 hrs
610 A sequence of directed studies in drawing.

ART—Drawing 5 hrs
611 A sequence of directed studies in drawing.

ART—Drawing 5 hrs
612 A sequence of directed studies in drawing.

ART—Drawing 5 hrs
613 A sequence of directed studies in drawing.

ART—Drawing 5 hrs
614 A sequence of directed studies in drawing.

ART—Painting 5 hrs
615 A sequence of directed studies in painting.

ART—Painting 5 hrs
616 A sequence of directed studies in painting.

ART—Painting 5 hrs
617 A sequence of directed studies in painting.

ART—Painting 5 hrs
618 A sequence of directed studies in painting.

ART—Painting 5 hrs
619 A sequence of directed studies in painting.

ART—Elementary School Art 5 hrs
631 Art concepts directed toward the preschool and elementary grade levels. Studio work will involve basic experimentation with art materials, teaching techniques, and art educational philosophy that can be applied

to an elementary school and/or adult art program.	
ART—Teaching Crafts	5 hrs
633 Experiences in a variety of craft activities to encourage design and cultural awareness. Skills of children at various levels will be considered as Craft Units are planned and adapted to classroom use.	
ART—Secondary School Art	5 hrs
632 Art concepts directed toward the adolescent and adult age levels. Studio work will involve basic experimentation with art materials, teaching techniques, and art educational philosophy that can be applied to an elementary school and/or adult art program.	
ART—Graphics	5 hrs
640 A sequence of directed studies in printmaking.	
ART—Graphics	5 hrs
641 A sequence of directed studies in printmaking.	
ART—Graphics	5 hrs
642 A sequence of directed studies in printmaking.	
ART—Graphics	5 hrs
643 A sequence of directed studies in printmaking.	
ART—Graphics	5 hrs
644 A sequence of directed studies in printmaking.	
ART—Contemporary Art History	5 hrs
650 Contemporary art and its development.	
ART—American Art History	5 hrs
651 The development of painting, sculpture, architecture, and crafts in the United States.	
ART—Renaissance Art History	5 hrs
652 An analysis of art monuments of the Renaissance.	
ART—Textile Design	5 hrs
660 A sequence of directed studies in textile design.	
ART—Textile Design	5 hrs
661 A sequence of directed studies in textile design.	
ART—Textile Design	5 hrs
662 A sequence of directed studies in textile design.	
ART—Textile Design	5 hrs
663 A sequence of directed studies in textile design.	
ART—Textile Design	5 hrs
664 A sequence of directed studies in textile design.	
ART—Weaving	5 hrs
665 A sequence of directed studies in weaving and knotting.	
ART—Weaving	5 hrs
666 A sequence of directed studies in weaving and knotting.	
ART—Weaving	5 hrs
667 A sequence of directed studies in weaving and knotting.	
ART—Weaving	5 hrs
668 A sequence of directed studies in weaving and knotting.	
ART—Weaving	5 hrs
669 A sequence of directed studies in weaving and knotting.	
ART—Pottery	5 hrs
670 A sequence of directed studies in pottery.	
ART—Pottery	5 hrs
671 A sequence of directed studies in pottery.	
ART—Pottery	5 hrs
672 A sequence of directed studies in pottery.	
ART—Pottery	5 hrs
673 A sequence of directed studies in pottery.	
ART—Pottery	5 hrs
674 A sequence of directed studies in pottery.	
ART—Thesis I & II	10 hrs

719 Preparation and execution of an applied project.

ART—Classroom Art Curriculum 5 hrs

733 In depth researching into problems of teaching art in the classroom. Curriculum planning and involvement in art materials and classroom teaching techniques will be observed.

ART—Techniques of Teaching Art 5 hrs

734 In-depth techniques involved in effective methods of guiding and supervising sequential art learning for early childhood to adolescence.

ART—Analysis of Art for Teachers 5 hrs

735 A non-studio course designed to assist the teacher in "art appreciation" activities. Historical and contemporary art movements will be compared and analyzed.

MATHEMATICS

MATH—Differential Equations 5 hrs

600 Prerequisite: Mathematics 246. Ordinary differential equations with applications to physics and mechanics.

MATH—Meteorology 5 hrs

601 Prerequisites: Mathematics 101 and 102. A basic course designed to acquaint the student with the fundamental concepts of meteorology and its relation to other fields of interest. Mathematics will be used when it seems essential to the complete understanding of a concept. Included are such topics as air masses and front, cloud classification, precipitation mechanisms, weather observations, fundamental forecasting theories, and interpretation of weather charts and diagrams.

MATH—Introduction to Mathematics

610 for Elementary and Junior High Teachers I 5 hrs

This course promotes facilities with the concepts, structure, and style of mathematics studied and taught in the elementary school with emphasis on the Arithmetic strands.

MATH—Introduction to Mathematics

611 for Elementary and Junior High Teachers II 5 hrs

This course promotes facilities with the concepts, structure, and style of mathematics studied and taught in the elementary school with emphasis on the geometric strands.

MATH—Geometry for Teachers 5 hrs

612 Designed to prepare the student to teach modern secondary school geometry. Euclidean and non-Euclidean geometrics and a study of the secondary school geometry curriculum and its materials.

MATH—Elementary Vector Analysis 5 hrs

615 Prerequisites: Math 247 or Consent of the Department Head. The elements of vector algebra and vector calculus with some space generalizations.

MATH—Functions of a Complex

618 Variable 5 hrs

Prerequisite: Math 247 or Consent from Department Head. Conditions for analyticity, elementary functions, the Cauchy integral theorem, the fundamental theorem of algebra, power series, residues, poles, conformal mapping.

MATH—Mathematical Analysis I 5 hrs

620 Prerequisite: Math 247 or Consent of Department Head. An introduction to the real and complex number systems, the basic notions on set theory, the limit concept and continuity, vector analysis, Fourier series and Fourier integrals.

MATH—Mathematical Analysis II 5 hrs

621 Prerequisite: Math 410. An extension of the introductory course to those topics normally covered in Advanced

Calculus and in the theory of the functions of a real variable.

MATH—Theory of Numbers 5 hrs

631 A study of elementary problems in number theory with topics from divisibility, congruences, residues, special functions, Diophantine equations, continued fractions.

MATH—Theory of Probability 5 hrs

640 Principal topics include combinatorial methods, axiomatic probability, discrete and continuous probability, distributions, mathematical expectation, moment generating functions.

MATH—Mathematical Statistics 5 hrs

641 Prerequisite: Math 640. Principal topics include sums of random variables, sampling distributions, properties of estimators, tests of hypothesis.

MATH—Numerical Analysis 5 hrs

655 Prerequisite: Math 246. Numerical solutions to problems in mathematics; roots of non-linear equations, zeros of polynomials interpolation, systems of linear algebraic equations, quadrature ordinary differential equations methods on computer.

MATH—Mathematical Models 5 hrs

659 Prerequisite: Math 240 or Math 246, or consent of department head. A study of various mathematical models, with emphasis on problems from the managerial, social, and biological sciences. Topics will be selected from the following: Graph Theory, Matrix Algebra, Probability, Combinatorial Theory, Mathematical Programming, Calculus-based Models.

MATH—Abstract Algebra 5 hrs

660 Prerequisite: Math 246 or consent of department head. A formal introduction to the algebra of groups, rings, and fields.

MATH—Linear Algebra 5 hrs

665 Prerequisite: Math 246 or consent of

department head. An introduction to the basic concepts of linear algebra. Topics include finite-dimensional vector spaces, bases, linear transformations, and matrices.

MATH—History of Mathematics 5 hrs

670 A survey of the historical development of mathematics with emphasis on topics for secondary teachers.

MATH—Seminar in Applications

701-702 of Mathematics 5 hrs.

Topics will vary among social, business, and scientific applications of mathematics, statistics, operations research and the computer.

MATH—Foundations of Geometry 5 hrs

712 A study of Euclidean and Non-Euclidean topics.

MATH—Probability and Statistics 5 hrs

740 A study of various distributions and hypothesis testing.

MATH—Topics in Modern

721 Algebra for Teachers 1-5 hrs

MATH—Topics in Matrix

722 Algebra for Teachers 1-5 hrs

MATH—Topics in Calculus

723 for Teachers 1-5 hrs

MATH—Topics in Geometry

724 for Teachers 1-5 hrs

MATH—Topics in Graph

725 Theory for Teachers 1-5 hrs

MATH—Topics in Combinatorial

726 Mathematics for Teachers 1-5 hrs

MATH—Topics in Computer

727 Science for Teachers 1-5 hrs

MATH—Independent Study

780 in Math 5 hrs

CpSc—Independent Study in

780 Computer Science 1-5 hrs

MODERN LANGUAGES

617—French Literature of the Seventeenth Century	5 hrs	703—Advanced Spanish Grammar	5 hrs
618—French Literature of the Nineteenth Century	5 hrs	706—Romance Philology For French and Spanish.	5 hrs
619—Contemporary French Literature	5 hrs	707—Old French	5 hrs
620—Guided Study in Foreign Languages	5 hrs	An introduction to the morphology and syntax of early French.	
650—French Phonetics	5 hrs	721—French Literature of the Renaissance	5 hrs
An intensive study of pronunciation building fluent expression.		722—French Literature of the Eighteenth Century	5 hrs
695/696—	5 hrs/5 hrs	731—German Literature Since 1945	5 hrs
"Study Abroad Program"		780—Independent Study in Foreign Languages	5 hrs
701—Advanced French Grammar	5 hrs		
702—Advanced German Grammar	5 hrs		

PHYSICAL EDUCATION

PE—Sex Education	5 hrs		
600 A study of the attitudes and standards of the physical, emotional and be- havioral aspects of sex.			and laboratory experience includes the study of the minute and gross anatomical and physiological struc- tures of man as it related to man living in the physical world of muscular ac- tivity.
PE—Materials and Methods in Physical Education	5 hrs	PE—Kinesiology and Therapeutics	5 hrs
605 A study of the administrative pro- cesses and methodology needed to develop a thorough understanding of desirable standards and program im- plementation in physical education.		660 A study of the movements of the human body and their working re- lationship in normal and atypical indi- viduals.	
PE—Elementary and Secondary School Physical Education	5 hrs	PE—Health Education	5 hrs
620 A study and practicum in the objec- tives, needs, methods, and materials of elementary and secondary school children involved in a modern day physical education program.		690 A study of the physical and mental health problems of society as they re- late to man and his confrontations with mental health, alcohol, disease, drugs, marriage, nutrition, physical fitness and sex.	
PE—Exercise Physiology	5 hrs	PE—Curriculum Planning in Physical Education	5 hrs
650 A combined study of the structure and function of the human body. Lecture		Deals with the administration, plan-	

ning, construction, and content of curriculum in modern day physical education programs.

PE—Scientific Aspects of Exercise 5 hrs

- 704** A consideration of the effect of exercise on the functions of the organic systems of the body with particular emphasis on the physiological changes occurring during exercise.

PE—Prevention and Treatment

705 of Athletic Injuries 5 hrs

This course deals specifically with the immediate care and long term prevention, treatment and rehabilitation of injuries occurring from sports and physical activities.

PE—Analysis of Motor Skills 5 hrs

- 706** Analysis of motor skills based on laws and principles of mechanics.

PE—Administration of Physical

713 Education in the School Program 5 hrs

Program planning; budgeting, selection, care and maintenance of equipment and facilities; personnel; and other administrative problems; evaluation of physical education in the school programs.

PE—Current Problems in Health,

714 Physical Education and Recreation 5 hrs

Problems met in a comprehensive program of health, physical education, or in recreation in the school and community. Special emphasis given to problems in areas of students' interest.

PE—History of Physical Education 5 hrs

- 715** Greek and Roman concepts of physical education, education and physical education in the Renaissance and Reformation, historic events, and principles of European and American

physical education. Special reference given to the value of physical education in the current economic and social life of the nation.

PE—Case Studies in Physical Education

717 and Athletics 5 hrs

Problems dealing with the administration and teaching of physical education and athletics are studied by using the case study method.

PE—Movement Education 5 hrs

- 720** Movement education, which emphasizes exploration and discovery of sound natural movement, will be studied to provide a basic understanding of the evolution, nature, purpose, methods, and various techniques used in this modern approach to physical education.

PE—Aspects of Sports in American

722 Culture 5 hrs

An analysis of the place of sport in American culture. A study of the historical influences of sport on economics, politics, nationalism, curriculum and methods of instruction professional preparation, dance, leisure, and amateur and professional status.

PE—Theories of Coaching 5 hrs

- 723** A focus on why athletes and spectators behave the way they do in various athletic and physical activity settings and how said scope encompasses the major psychological dimensions underlying such behavior.

PE—Independent Study in Physical

780 Education 5 hrs

The study of a topic or problems in Physical Education significantly related to the student's interest. (By approval of student's adviser.)

PHYSICS

PHYS—Thermodynamics 5 hrs

600 Prerequisites: Physics 225 and Math 300. A study of temperature and its measurement, calorimetry, and some topics from thermodynamics. Five lecture-recitations per week.

PHYS—Modern Physics 5 hrs

605 Prerequisites: Physics 224 and 225. May be taken concurrently with Math 246. An introduction to modern physics, dealing with the elemental nature of matter and radiation, ionization of gases, the quantum theory, and current developments in atomic physics.

PHYS—Electricity and Magnetism I 5 hrs

610 Prerequisite: Physics 224. With consent of Instructor, may be taken concurrently with Math 300. A course considering in somewhat more advanced manner the topics of electrostatics, magnetostatics, electrolysis, basic circuit theory, and related topics.

PHYS—Mechanics—Analytical 5 hrs

615 Prerequisite: Physics 230. May be taken concurrently with Math 300. Kinematics, using vector analysis, dynamics of particles, rotation and planetary motion, the linear harmonic oscillator, studies of energy, momentum and impact, introduction to the most general methods of solving dynamical problems.

PHYS—Electricity and Magnetism II 5 hrs

620 Prerequisite: Physics 410. This course is a continuation of Physics 410 with emphasis on electrodynamics, alternating current theory, transmission lines, filters, electromagnetic wave theory and related topics.

PHYS—Nuclear Physics 5 hrs

640 Prerequisite: Physics 320 or 310. A study of natural radio-activity, interaction of radiation with matter, radiation measuring instruments and the detection of nuclear particles plus a survey of the current state of experimental and theoretical nuclear physics.

PHYS—Electronics 5 hrs

645 Prerequisite: Physics 224. A study of the elementary principles of electronics. The laboratory work consists of the study of electronic circuits and the use of testing equipment. Four lecture-recitations and one, two-hour laboratory per week.

PHYS—Quantum Mechanics 5 hrs

650 Prerequisites: Physics 310 or 320, Math 300. Introduction to the quantum mechanics of one-dimensional systems. An introduction to Schrodinger's equation with emphasis being placed on solutions for one-electron atoms.

PHYS—Teaching Elementary 5 hrs

660 School Science

A course dealing with the everyday aspects of physics, chemistry, & astronomy as they might need to be explained by the elementary teacher with little specific training in the physical sciences. The work will include demonstrations & suitable experiments that can be performed with materials available in the average elementary & home situation.

PHYS—Physics Laboratory I

675A, 676A, 677A 1, 1, 1 hrs

Selected experiments from the various branches of physics, clarifying and expanding the work of the classroom, and developing good laboratory techniques. The evaluation and the interpretation of experimental data.

PHYS—Physics Laboratory II

675B, 676B, 677B 1, 1, 1 hrs

A continuation of Physics Laboratory I.

PHYS—Physics Laboratory Radioisotopes

680 2 hrs

A laboratory course for students other than physics majors who wish to study the basic techniques of handling radioisotopes and some of the properties of these materials.

PHYS—Introduction to Research Methods

690, 691, 692

5, 5, 5 hrs

This course consists of two or three lectures and demonstrations per week with laboratory work. The lectures will include the various research techniques, theory of errors, analysis of experimental data, use of library sources, and report writing. The student will be required to use library sources and to perform various experiments. The student will also be required to report his work by class talks and written reports.

PHYS—Curriculum Study in 5, 5 hrs

700-710 Physics for Secondary Teachers

These courses are designed to acquaint the student with some of the problems encountered in a high school physics presentation. A personalized system of instruction (self-paced-self study) will be used to introduce the students to PSSC, Harvard Project, and ECCP curriculum projects. Both need not be taken to get credit.

PHYS—Mechanics for Teachers 5 hrs

720 Four lectures and discussions and one, two-hour laboratory period per week. Prerequisite: Math 245. This course is designed to aid the elemen-

tary physics teacher in dealing with problems in mechanics which may arise in his teaching. The effective presentation of physics concepts in this area will be emphasized.

PHYS—Waves, Electricity, and

730 Magnetism

5 hrs

Prerequisite: Physics 720. This course is designed to aid the elementary physics teacher in dealing with problems in waves, electricity, and magnetism which may arise in his teaching. The effective presentation of physical concepts in this area will be emphasized. Four lectures and discussions and one, two-hour laboratory period per week.

PHYS—Modern Physics

5 hrs

740 Prerequisite: Physics 720. This course is designed to aid the elementary physics teacher in dealing with problems in modern physics which may arise in his teaching. The effective presentation of physical concepts in this area will be emphasized. Four lectures and discussions and one, two-hour laboratory period per week.

PHYS—Independent Study

780

HISTORY

The following dual listed courses are open to both undergraduate and graduate students with the permission of the instructor.

Independent Studies and Colloquiums 400 Level

400/600	Studies in Histiography	5 hrs
410/610	Studies in Ancient and Medieval History	5 hrs
420/620	Studies in Early Modern Europe	5 hrs
430/630	Studies in Nineteenth & Twentieth Century World	5 hrs

440/640	Studies in Modern World Revolutions	5 hrs
445/645	Studies in Twentieth Century History since 1928	5 hrs
450/650	Studies in U.S. History	5 hrs
455/655	Studies in Social & Cultural History of US	5 hrs
460/660	Studies in Southern History	5 hrs
465/665	Studies in U.S. Diplomatic History	5 hrs

470/670	Studies in Modern Diplomatic History	5 hrs	HIST—Readings and Research in Modern World History Since 1900	5 hrs
490/690	Studies in Regional and Local History	5 hrs	HIST—Readings and Research in Diplomatic History Since 1870	5 hrs
495/695	Studies in Military History	5 hrs	HIST—Readings and Research in Russian History	5 hrs
HIST—Readings and Research in 700	American History	5 hrs	HIST—Readings and Research in European Social and Cultural History	5 hrs
HIST—Readings and Research in 701	American Social and Cultural History	5 hrs	HIST—Readings and Research in Geography for Teachers	5 hrs
HIST—Readings and Research in 702	Southern History	5 hrs	This course considers the evolution of the discipline, its current conceptual core; area "element-complexes," systematic vs. regional analytical procedures. Considers standard bibliographic statistical and cartographic sources. Procedures in adapting information from several sources to the classroom.	
HIST—Readings and Research in 703	American Diplomatic History	5 hrs		
HIST—Readings and Research in 704	English History	5 hrs		
HIST—Readings and Research in the 705	Western Tradition	5 hrs		

SOCIOLOGY

SOC—Urban Sociology	5 hrs	SOC—Criminology	5 hrs
601	A study of the modern city.	620	A study of the social factors related to criminal behavior: prisons, and treatment practices.
SOC—Race and Minority Groups	5 hrs	SOC—Juvenile Delinquency	5 hrs
602	Patterns of domination and subordination; criteria for differential treatment; techniques of resistance to domination and methods of enforcing subordination. The social problems of discrimination.	621	This course emphasizes three areas of the problem of juvenile delinquency: Causation, Treatment and Prevention.
SOC—Population Problems	5 hrs	SOC—Penology	5 hrs
603	Population analysis, demographic theory, differentials, population policies, distribution of people.	622	A study of the American prison system. Comparison with the prison system of other nations will be made.
SOC—Sociological Theory	5 hrs	SOC—Introduction to Gerontology	5 hrs
610	A survey of the major theoretical concepts of major writers in sociology from Comte to the present.	625	An interdisciplinary approach to the study of the process of aging.
SOC—The Family	5 hrs	SOC—The Feminist Movement	5 hrs
616	The American family as a social institution.	630	A historical study of the Feminist Movement in the United States emphasizing its political, economic, and social impact.

SOC—The Field of Social Work		5 hrs
615	An introductory course to the various aspects of present day social work. Considers family and children's services, behavior clinics and case work approach to social problems, the courts, probation and parole, medical, social services, group work, organization, public assistance and social security.	
SOC—Social Work Methods		5 hrs
604	A study of the conceptions, functions, and processes of various methods of social work through which the social functioning of individuals, groups, and communities may be enhanced. Emphasis will be on analyzing problem situations, then selecting appropriate goals and strategies of intervention.	
The 700 level courses will consist of seminar situations in which specific readings are discussed and directed research projects are undertaken. The maximum number of students in such courses shall be limited to ten.		
SOC—Readings and Research in Social Problems		5 hrs
700		
SOC—Readings and Research in Urban Sociology		5 hrs
701		
SOC—Readings and Research in Race and Minority Groups		5 hrs
702		
SOC—Readings and Research in Population Problems		5 hrs
703		
SOC—Readings and Research in the Family		5 hrs
716		
SOC—Readings and Research in Criminology		5 hrs
720		
SOC—Readings and Research in Juvenile Delinquency		5 hrs
721		
SOC—Readings and Research in Penology		5 hrs
722		
SOC—Independent Study		5 hrs
780		

POLITICAL SCIENCE

POL SCI—The Legislative Process		5 hrs
601	An analysis of the legislative process in the U.S. Congress and American State Legislatures.	
POL SCI—International Relations		5 hrs
603	An analysis of the basic forces which govern the behavior of nations in their relations with one another. This study of world power conflicts, diplomacy and international cooperation is designed to acquaint the student with the basic issues and areas of conflict among the nation-states of the contemporary world.	
POL SCI—Public Administration		5 hrs
604	An analysis of the theory, basic principles and practices of public administration in the United States through a study of organization, management, budgeting, personnel, administrative leadership and the characteristics of modern bureaucracies.	
POL SCI—The American Constitutional System		5 hrs
605	An examination of the development and nature of the American Constitutional system through Supreme Court cases defining the interrelationships of the executive, judicial and legislative branches and the relationships of the executive, judicial and legislative branches and the relationships of the states to the national government.	
POL SCI—Soviet Foreign Policy		5 hrs
606	Prerequisite: Political Science 101. This course is designed to enable the student to understand about the nature of foreign policy in general and Soviet foreign policy in particular. The topic will be taught from the point of	

view that Soviet foreign policy is a continuation of foreign policy goals of pre-Bolshevik Russia.

POL SCI—Government and Politics in
608 Latin America 5 hrs
 An analysis of the political institutions and political processes of the Latin American nations.

POL SCI—American Political theory 5 hrs
610 Prerequisite: Political Science 101. An analysis of the ideas underlying government and politics in the United States through a survey of American political thought from colonial times to the present.

POL SCI—The Presidency 5 hrs
611 An analysis of the role and function of the American Presidency.

POL SCI—The Judicial System and the
612 Judicial Process 5 hrs
 A systematic study of the judicial system and its role in the administration of justice.

POL SCI—Government and Politics of
615 the Soviet Union and the Eastern European Bloc 5 hrs

POL SCI—The Legislative Process 5 hrs
620

POL SCI—Comparative Government 5 hrs
621 A study of universal political principles and an application of these principles to the study of political systems on a comparative basis.

principles and an application of these principles to the study of political systems on a comparative basis.

The 700 level courses will consist of seminar situations in which specific readings are discussed and directed research projects are undertaken. A maximum number of students in such courses shall be limited to ten.

POL SCI—Readings and Research in the
700 American Political System 5 hrs

POL SCI—Readings and Research in
701 State and Local Government 5 hrs

POL SCI—Readings and Research in
702 American Political Thought 5 hrs

POL SCI—Readings and Research in
703 Constitutional Studies 5 hrs

POL SCI—Readings and Research in
704 Latin American Studies 5 hrs

POL SCI—Readings and Research in
705 Comparative Government 5 hrs

POL SCI—Readings and Research in
706 International Relations 5 hrs

POL SCI—Readings and Research in
707 Political Thought 5 hrs

POL SCI—Readings and Research in
708 Soviet and Eastern European Studies 5 hrs

ANTHROPOLOGY

The 700 level courses will consist of seminar situations in which specific readings are discussed and directed research projects are undertaken. The maximum number of students in such courses shall be limited to ten.

ANT—Readings and Research in
700 A,B,C Anthropology 5 hrs

ANT—Readings and Research in
701 Peoples and Cultures of Africa 5 hrs

ANT—Readings and Research in
702 Peoples and Cultures of North America 5 hrs

ANT—Readings and Research in
703 Peoples and Cultures of Oceania 5 hrs

ANT—Readings and Research in
704 Cultural Anthropology 5 hrs

SOCIAL SCIENCES

The following Economics courses offered by the Department of Business Administration will be acceptable toward the fulfillment of requirements for the M.Ed. degree in Social Science Education.

BUS ADM—Macroeconomic Analysis 5 hrs

621 Prerequisites: BA 151 and 152. An intensive study of the measurement, analysis, and control of aggregate economic activity. The economic principles underlying national income, business cycles, and growth are examined; and particular attention is given to problems involved in formulating economic policies.

BUS ADM—Intermediate Economic

622 Analysis 5 hrs
Prerequisites: BA 151 and 152. An intensive study of price theory and its uses. Specific topics covered include the theory of demand, the theory of the firm, pricing in competitive and monopolistic markets, and the pricing of economic resources.

BUS ADM—Consumer Economics 5 hrs

623 This course is designed for teachers and those students who desire a detailed study of consumer education are reviewed, including consumer goods, consumers' services, buying problems, consumer organization, problems of personal finance, and well-balanced spending programs.

BUS ADM—Money and Banking 5 hrs

625 Prerequisites: BA 151 and 152. A study of the basic principles and concepts of money and credit and their impor-

tance in the present economy. The major topics emphasized are the key role of the commercial banking system in our economy, central banking as a means of expanding and stabilizing the supply of money and credit, monetary and fiscal policies, international banking and finance, and other banking credit institutions.

BUS ADM—Labor Economics 5 hrs

626 Prerequisites: BA 151 and 152. A study of the origin of the labor movement; population and the labor force; organized labor; union organization and management; collective bargaining; and the problems of unemployment, full employment, wage theory and policies, and labor legislation.

BUS ADM—Public Finance 5 hrs

646 Prerequisites: BA 151 and 152. A study of the principles and techniques of government debt; specific tax and non-tax revenues; and expenditures at the national, state and local levels.

BUS ADM—Economics for High

720 School Teachers 5 hrs
Develops the content, teaching, and application and economics to citizen needs for teachers who desire an understanding of general economics in the public school curriculum.

Graduate Faculty

GRADUATE FACULTY

GEORGE B. BELDEN (1971) Associate Professor of Education
B.A., Florida State University; M.S., Florida State University; Ph.D., Florida State University.

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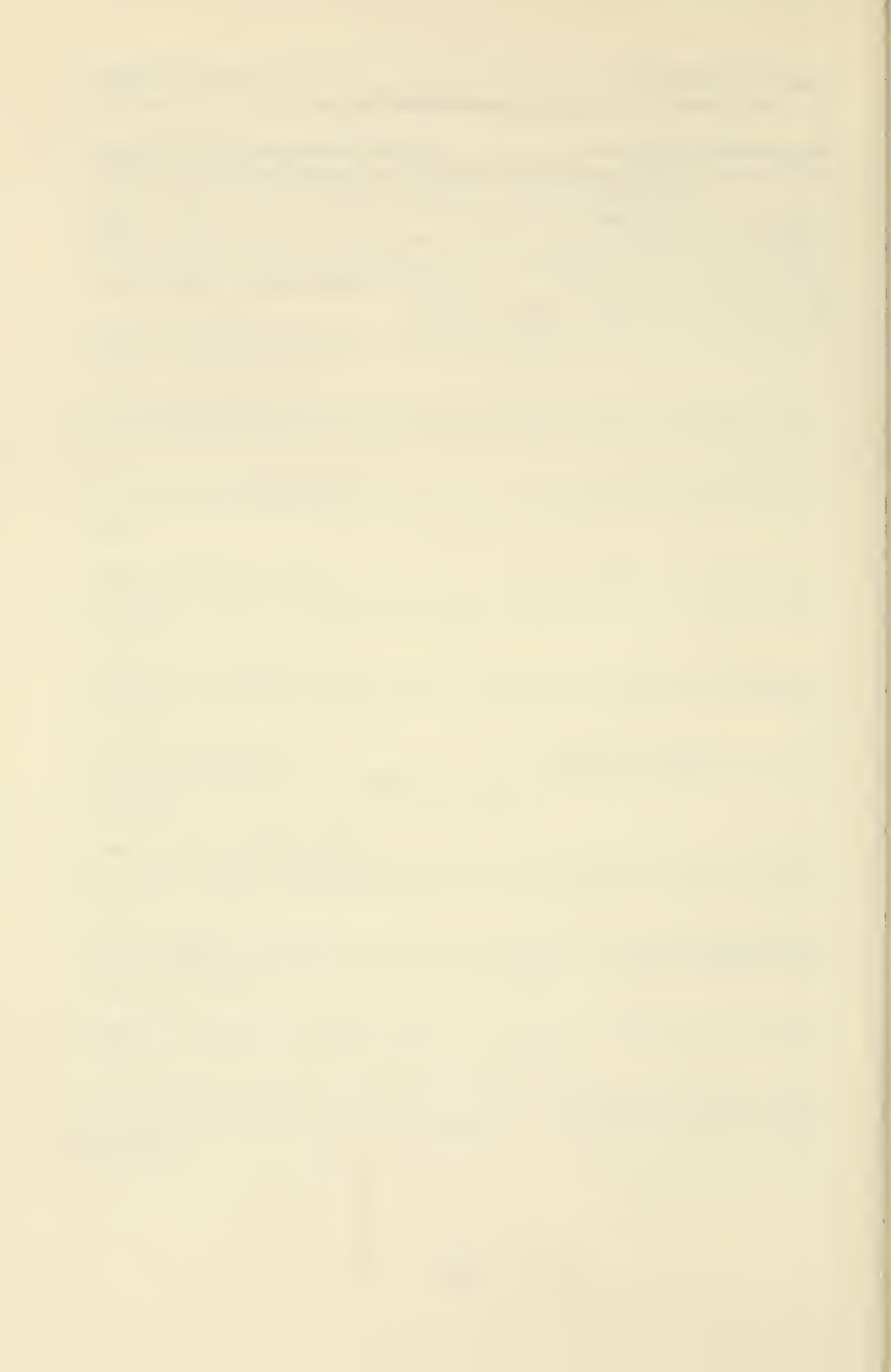
- DAVE PANDRES, JR. (1971) Professor of Mathematics
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- JOHN F. PEARCE (1970) Fuller E. Callaway Professor of Economics
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- JOHN E. RABER (1971) Associate Professor of Physical Educ.
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- WILLIAM P. ROBERTS (1949) Professor of Social Science
A.B., Emory University; M.A., Ph.D., University of North Carolina; further study, Tunghai
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- HUGH I. SHOTT, II (1966) Professor of English
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- JUDITH N. TRUE (1975) Assistant Professor of Education
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